

5. FINAL REPORT APPENDICES

- a. List of Futures Planning Group Members
- b. Overview of Input for Phase 1
- c. Overview of Input for Phase 2
- d. Overview of Input for Phase 3
- e. Future Scenarios

Appendix A: List of Futures Planning Group Members

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Appendix B: Overview of Input for Phase 1

Envision a young person who is prepared for the world ...

Question 1: What skills, knowledge and qualities does this person possess?

- Learning for the development of the 'whole child' (the heart, mind, soul and body) and the development of multiple intelligences
- Deep understanding of self; self esteem, confidence and respect
- Relationship and interpersonal skills; empathy and cooperation
- Life long learning and work skills that are practical and adaptable
- Strong academic foundation based on literacy, mathematics and languages
- Global perspective; tolerance and understanding of other cultures
- Connectedness to and stewardship of community and the natural environment
- Use of computers, multi-media and other technologies
- Life management and balance

Selection of Key Skills identified:

Critical and creative thinking, problem solving, decision-making, conflict resolution, resilience, literacy (reading, writing, speaking), languages, practical and hands-on work experience, social and citizenship skills, independent living skills, communication and listening, life-long learning and study skills, physical/mental wellbeing and fitness, outdoor skills, self discipline, technology/computer/multi-media skills, financial management, interpersonal and relationship skills, collaboration and cooperation, stress management, research and analysis of information, teamwork, stewardship of environment and community, goal setting, innovation, organizational skills, time management, improvisation, leading and teaching others, trade and business skills

Selection of Key Knowledge identified:

Environmental and cultural awareness, core academic knowledge, morals and manners, understanding of life and career choices, multiple intelligences, arts and music appreciation, conservation ethic, social justice, history, healthy living and wellness

Selection of Key Qualities identified:

Empathy, common sense, self confidence, self awareness and understanding, self esteem, open mindedness, tolerance, friendliness, respect for self and others, honesty, community-minded, global perspective, motivation, adaptability, compassion, risk taking, fun loving, independent, resourceful, passionate, strong work ethic, determination, imagination, positive outlook, responsibility, enthusiasm

Question 2: What is the role of the school and community in the preparation of this young person?

School:

- Create a safe, positive, fun and caring learning environment for all students and staff
- Foster a love of learning
- Teach the whole child – multiple intelligences, personal, social skills and academics
- Offer a variety of programs to support the full diversity of student needs and choices; balance resources to support sports, arts/music, trades and technology programs; encourage a range of options for students including academic and trades streams
- Provide 'life' skills education and hands-on learning with application to the workplace, community and home environments
- Provide solid core education – literacy, math, science, social, technology, languages
- Support excellence in teaching and administration to meet needs of all students including involvement of students in decision-making
- Encourage and support positive social interaction of students, including in-school, after school and community-based programming (outdoors and indoors)
- Build foundations for and exposure to global perspectives, community issues, choices available, diversity of ideas and lifestyles
- Balance curriculum work load with time for students to reflect, breathe, do homework and special projects, integrate school work with community activities

School and community:

- School and community as partners in education through cooperation and collaboration (e.g. volunteers, public health, business, family support, mentors/coaches, facilities use)
- Foster connection between community values and school values – schools reinforce important community values; work positively with the Province to allow local values/needs to drive program and facilities decisions; build a shared vision
- Develop support triad of family – school – community; ownership of all aspects of education by all (family, schools, community) to build integrated solutions
- Provide wider range of options for all students by offering courses and credit learning experiences in connection with the community ... community becomes the classroom
- Community's role is to reinforce and support the learning processes going on in school; integrated and consistent support and linkage from K through 12

- Mentorship/positive role modeling for the student from both school and community
- Community-based opportunities for student job experience and practical learning, social events, involvement in citizenship
- Draw education themes, integrating concepts, delivery mechanisms from the values and assets in the communities (e.g. environmental education, outdoor activities, mountain arts and culture; sport pursuits); partner with community institutions

Appendix C: Overview of Input for Phase 2

In Phase 2 of the project, exploration took place of the contextual trends and driving forces of change in relation to public education program delivery, and the development of future scenarios for the Bow Valley. The list of driving forces derived from the Phase 2 public input is in the table below. The two forces chosen as the axes for the creation of scenarios were:

- Changing social fabric
- Information technology

Envision a young person who is prepared for the world ...

Question #1: What shifts, trends and driving forces happening in the world will impact the public school system’s ability to prepare this person?

Question #2: Of these, which ones are the most important and the most uncertain?

Forces shaping the future of public education in the Bow Valley

DRIVING FORCES	DESCRIPTION
Changes in the public education system	Fragmentation – multiple local school boards. Will there even be any buildings necessary for school kids? How will education be delivered? Needs for different skills – critical thinking, language, integrated curriculum. Home schooling on the rise. Pressures for academic achievement.
Social change and fabric	Changes in the nature of the family and community. Social structures affecting the ability of CRPS to deliver education. Different relationships in our community due to cultural shifts (fragmented versus connectedness). Missing role of the extended family – who has the voice for the child? How to identify with the globalized world? Locus of support for the whole child (focal point of school providing all support vs. family/school/community each having a clear role in providing support within an integrated, collaborative system).
Economic structure	Living in a globalized world with increased competition and opportunity with jobs shifting away from North America. The basis of the Bow Valley’s business economy will change. Different jobs in the future. Less reliance on carbon – implications for education.
Demographic shifts	Global population increase - population changes in cultural make up of local and regional population. Aging local population with effects on the numbers of school

	age children and availability of teachers. Immigration of different cultures to the Bow Valley. Ignorance of other cultures and languages. Part time residents increasing as percentage of the population. Implications for resources for education in the Bow Valley (i.e. availability of human, money, infrastructure resources as driven by population (#'s) and demographics (mix of people)).
Natural environmental pressures	Global environmental change (collapse or amazing adaptation) leading to competition for resources. The quality, quantity and diversity of the Bow Valley's ecosystem(s) and the relations to our economy.
Information technology	Pace of change increasing, virtual connections, "plugged in". Changing relationships between self and technology and the changing notions of reality. Changing social skills and vehicles for communication – lack of face to face contact.
Knowledge base	Volume of information – too large to memorize – how to discern? Quantity of information, how to teach it? What technology to use to teach with? Changing role of the educator.
Role of First Nations	Role in the future – playing catch up now – how to get ahead of the curve? Role of family, elders, community in the future of the children and the development of their voice.

Appendix D: Overview of Input for Phase 3

Initial Strategic Directions

CONTENT AREAS OF PHASE 3 DISCUSSIONS

Community Connections	Strategic directions 1 - 4
Program Delivery	Strategic directions 5 - 8
Learning Content and Assessment	Strategic directions 9 - 12
Learning Places	Strategic directions 13 - 16
Role of the Teacher	Strategic directions 17 - 20

1. Community Connections

One of the two strongest over-arching directions identified in the Futures Planning process, this area emphasizes the development of partnership development and linkages between public schools, families, local organizations and the community as a whole. The purpose of these networks and partnerships is to support a wide array of learning experiences for both K-12 students and the wider community, and the sharing of resources, expertise and venues for learning. As expressed in the Phase 3: Banff Community Forum, an overarching theme of CRPS can be described as “community involvement in education for the entire community”. Within this area, it is important to assess and allow schools and community partners to each focus on contributing what it is that they do best.

Strategic Direction 1:

Develop ‘community schools’ that are the physical hub of learning in the community

The concept of a ‘community school’ views schools as the physical ‘hub’ of learning in the community, integrating educational delivery with such services as daycare, parent development centres, before/after school care, medical and mental health services, social services/agencies, adult learning etc. This concept maximizes partnerships with community agencies and services, connects learners of all ages, and allows for efficient and effective use of a community learning space at a time when student enrollment is declining. Community groups might utilize the space of schools, allowing opportunities for students to become involved in and learn from their activities (e.g. drama clubs, senior’s activities). In other cases, a worker/coordinator from community service agencies could be located in the school building.

Strategic Direction 2:***Structure learning opportunities within the community setting through the support of skilled community resource people***

Create cooperative linkages between public schools and the local community by bringing skilled community resource people into the classroom to share 'real-world' knowledge (arts, music, life-skills, trades, health sciences, journalism, environment, etc), and structuring opportunities for students to apply their new knowledge back in the community setting through a project that they spearhead. Community resource people augment the curriculum in a way that provides connection to the 'real-world' and reflects the values/attributes of the community we live in. Students, in turn, can apply their learning in a 'hands-on' way that develops their passion or area of interest, and encourages them to actively participate in community affairs.

Strategic Direction 3:***Develop local programs that engage students in work experience and work-related skill development***

A need for an expanded set of student learning opportunities that provide relevant work experience and training has been clearly expressed. These programs could span apprenticeship, business skills development, mentorship opportunities, work/study programs, etc. This kind of learning opportunity can be best gained through cooperative community programs (e.g. Partners in Education)

Strategic Direction 4:***Educate and involve parents and businesses about 'whole child education'***

Build a foundation of understanding in the community about the philosophy and main goal of CRPS – whole child education. Clarity and consistency of this message is important, and should form the context for all communications and public engagement.

Community outreach would focus on both the scope of educational content (i.e. not just academic achievement), and the process of public education itself.

2. Program Delivery

This area considers new ways to think about delivering education within CRPS that expands the traditional notion of classroom to include different modes of and venues for learning, and allowing students more choice in identifying what delivery methods work best for their needs. Flexibility is a key concept in future CRPS education planning in relation to schedules, options, use of technology in learning, and pacing education to meet the needs of the children.

Strategic Direction 5:***Broaden the range of program opportunities to meet the needs of all students***

There is a need for creating a stronger balance between academic achievement and other kinds of knowledge and skill development, such as arts, trades, entrepreneurship, personal and social development, etc. To achieve this, CRPS must broaden the variety of programs to enhance engagement of students across the spectrum of personal strengths, interests and life goals. Courses could be interest-based, rather than age-based, or could integrate secondary and post-secondary content and credits.

Strategic Direction 6:***Use student-based methods to focus learning on the needs of the individual and enhance student engagement***

Develop and implement alternate methods of program delivery that are student-based, allow student choice, and encourage student's taking responsibility for and ownership of their learning. Such methods must place the student at the centre of learning and consider the variety of learning needs and styles – the teacher becomes a facilitator of the learning experience. The goal is to engage students in their chosen program of study in a way that promotes love of learning, class enrichment, experiential learning and participation.

Strategic Direction 7:***Flexibility in program scheduling to maximize learning opportunities and support of student needs***

A flexible schedule should consider optimum combinations of the school day, school terms and school year in order to maximize community-based learning opportunities and partnerships, and better meet the needs of students (e.g. work experience and extra-curricular activities for credit, home situation, life balance, energy maintenance, support for participation in the arts and sports).

Strategic Direction 8:***Flexibility in program delivery methods to maximize use of space, technology and resources, and support of student needs***

Flexible program delivery methods includes creative ways of using technology to link students within and between classrooms in the Bow Valley; support for independent and self-directed learning; community-based learning opportunities; enhancing opportunities for language learning; and recognizing and enhancing cross-curricular connections through deeper learning experiences (e.g. project-based learning). Key aspects of flexibility of program delivery are the recognition of credits for non-traditional

approaches, and the recognition of current constraints relating to the provincial curriculum (both content and volume of information).

3. Learning Content and Assessment

The important messages in this area relate to orienting both learning content and ways of assessing learning to achieve the goal of whole child education. This includes learning content that provides a solid foundation of core subjects (math, literacy, science, social, etc), and yet goes beyond to focus on the development of personal and social development, life skills and balance, work-related skills and community involvement. The range of options for assessing learning must reflect the diversity and the strengths of the students, and the range of programs available.

Strategic Direction 9:

Create curriculum (learning content) that is meaningful and relevant for 'whole child education'

This entails a review of the provincial curriculum to determine content gaps, curriculum connections and areas of focus in relation to whole child education. Local curriculum delivery can then be tailored to offer and measure the range of qualities and content required for whole child education.

Strategic Direction 10:

Assess the individual student's strengths, and measure both the content and process of whole child education

There is a need to determine what success looks like on a social, emotional, spiritual, physical and cognitive level. School, family and community partners/agencies can be involved in determining indicators or performance measures that reflect the range of qualities and skills required in developing the whole child. A key aspect of this direction is the assessment of learning based on the needs and strengths of the individual student, rather than assessing strictly on academic marks and achievement test results.

Strategic Direction 11:

Focus learning content and assessment on applied learning

Through programs such as work experience, apprenticeship and experiential learning, students can apply the curriculum content to real-world situations. This approach then demands creative ways of assessing both learning content and process that can measure the range of qualities and skills required. Key to this is the involvement of both schools and community partners in evaluating educational delivery and learning.

Strategic Direction 12:***Reduce the amount and scope of learning content to achieve more depth of learning***

The amount of material in the curriculum at present, and the pace at which it must be taught, is highly challenging for both students and teachers. The intent is to focus or reduce the amount of content, and slow learning down to allow for adequate reflection and deeper learning. In each grade, students and teachers can work together to determine a plan for learning that reflect the individual needs. Self-paced learning, inquiry-based learning, experiential learning and creative/strategic use of technology can all help to engage students in the curriculum in a more relevant way and deepen learning.

4. Learning Places

Learning places need to move beyond the traditional physical classroom to encompass the larger community and environment in which we live in the Bow Valley. The content and processes for whole child development can be supported by a diversity of learning spaces and modes, which include community venues, remote learning, field trips and outdoor excursions, learning from home, etc. Technology is a key tool for students and teachers in expanding access to information, learning networks and virtual classrooms.

Strategic Direction 13:***Move students out into the community for real-world learning experiences***

Through school-community partnerships, students can engage in learning programs that take place in the community setting, including local businesses, studios, camps, etc. This approach views the whole community as a learning place, which opens up many opportunities beyond the traditional school classroom and promotes community involvement by students.

Strategic Direction 14:***Deliver educational programs within and about the natural environment of the Bow Valley***

Utilize the landscape of the Bow Valley as an outdoor classroom to increase understanding and appreciation of the natural environment, and to build a sense of place and an ethic of stewardship in students. Outdoor learning spaces are ideal for outdoor and environmental education program delivery, and can also be used as a stimulating setting for any subject matter. Outdoor excursions should be progressively longer and more involved in the Bow Valley schools throughout grades K through 12.

Strategic Direction 15:***Use technology to bring the world into the classroom and the classroom to the world***

Technology can connect students within the Bow Valley schools and to outside sources through video conferencing and remote learning, providing opportunities for both community connections and independent learning. Use of technology needs to be managed in a way that promotes social interaction, rather than detracting from it. Through technology, content can be brought to the classroom and accessed for teacher-led or self-directed learning.

Strategic Direction 16:***Use of school facilities to bring types of education together***

Community-based education services can become more integrated when housed in the same physical building(s). School buildings and infrastructure can be used by both students and others in the community as a venue for learning and meeting. Integration of education services allows students access to diverse learning opportunities and age blending. Examples: Bow Valley College, Day Care and Preschool

5. Role of Teachers

To support whole child development, the role of the teacher needs to shift further to one of facilitator and provider of learning opportunities. This has implications for both the student-teacher relationship and the role of family/community in educating the child – as both require evolving toward a collaborative partnership model. Teachers need ongoing support in their own learning community, based on an approach of 'whole teacher development', in order to develop the skills required for applying new approaches to teaching.

Strategic Direction 17:***Support and develop teachers as facilitators of learning***

The role of teachers is shifting to one of facilitator of self-directed learning rather than content-expert and 'dispenser' of knowledge. This new approach is compatible with whole child development as it shifts the responsibility for learning to the student, and allows for more freedom to integrate the curriculum with individual needs. Teachers are expected to provide leadership for students in developing personal learning strategies, use of technology for learning, access to community-based sources and venues for learning, facilitating peer-to-peer learning between students, etc.

Strategic Direction 18:***Foster parents and community members as co-teachers***

In moving to a community-based model for public education, parents and community members become instrumental in their own role as 'teachers'. To function effectively in this role, parents and community members require the necessary skills and support, and need to be integrated into the educational delivery process. An important challenge is to determine clear boundaries between the responsibilities of teachers and the responsibilities of family and community in educating children about important life skills, social interactions, discipline, work ethic, etc.

Strategic Direction 19:***Support the ongoing personal and professional development of teachers in their own learning community***

To parallel the concept of whole child development, whole teacher development requires full support for the personal and professional growth of teachers. This involves identifying the key qualities and skills necessary, role shifts, and different considerations for teaching of the whole child. Teachers need to be supported as mastery learners in community with other teachers (open to feedback, reflect on own teaching, have mentors, collaboration, sharing best practice). Teacher support and development is reflected in such things as: performance management, honoring new ideas and creativity, engaging teachers in program and policy development, and effective communications.

Strategic Direction 20:***Focus on enhancing and strengthening the student-teacher relationship***

The student-teacher relationship is a critical dynamic in successful teaching and learning. Allowing time for teachers to spend one-on-one with students is a prime ingredient in relationship building. To build and strengthen this relationship, teachers could stay with students for a longer time period (e.g. 2-3 years), or focus their interaction with students only in certain subjects, in a way that draws upon the teachers specific interests, skills and passion. In this way, teachers and students form a solid working relationship based on the individual needs and strengths of each.

Appendix E: Future Scenarios

Phase 2: Future Scenarios for Public Education in the Bow Valley

CRPS Futures Planning is an information and idea gathering process to identify community values, education trends and forces of change affecting education. It will determine key directions for the future of public education in the Bow Valley. The outcome of the Futures Planning process is to inform future CRPS strategic planning and decision making; leading to actions that will support student learning over the short and long term.

In Phase 2 of the project, exploration took place of the contextual trends and driving forces of change in relation to public education program delivery, and the development of future scenarios for the Bow Valley.

The list of driving forces derived from the Phase 2 public input is in the table below. The two forces chosen as the axes for the creation of scenarios were:

- **Changing social fabric**
- **Information technology**

Creation of Scenario Worlds and a Scenario for each

The next task was to tease out the kind of society (scenario world) that the Canadian Rockies Public School District (CRPS) would exist in, in 2030 for each of the four combinations of the two key drivers of change. The story-line (scenario) of how each of these worlds could credibly emerge from today's situation was then articulated for each scenario world. This experience reinforced the key point of the whole visioning project – we in the CRPS face a range of futures. We do not face just one future, especially not the one we tend, quite unconsciously, to take for granted.

Forces shaping the future of public education in the Bow Valley

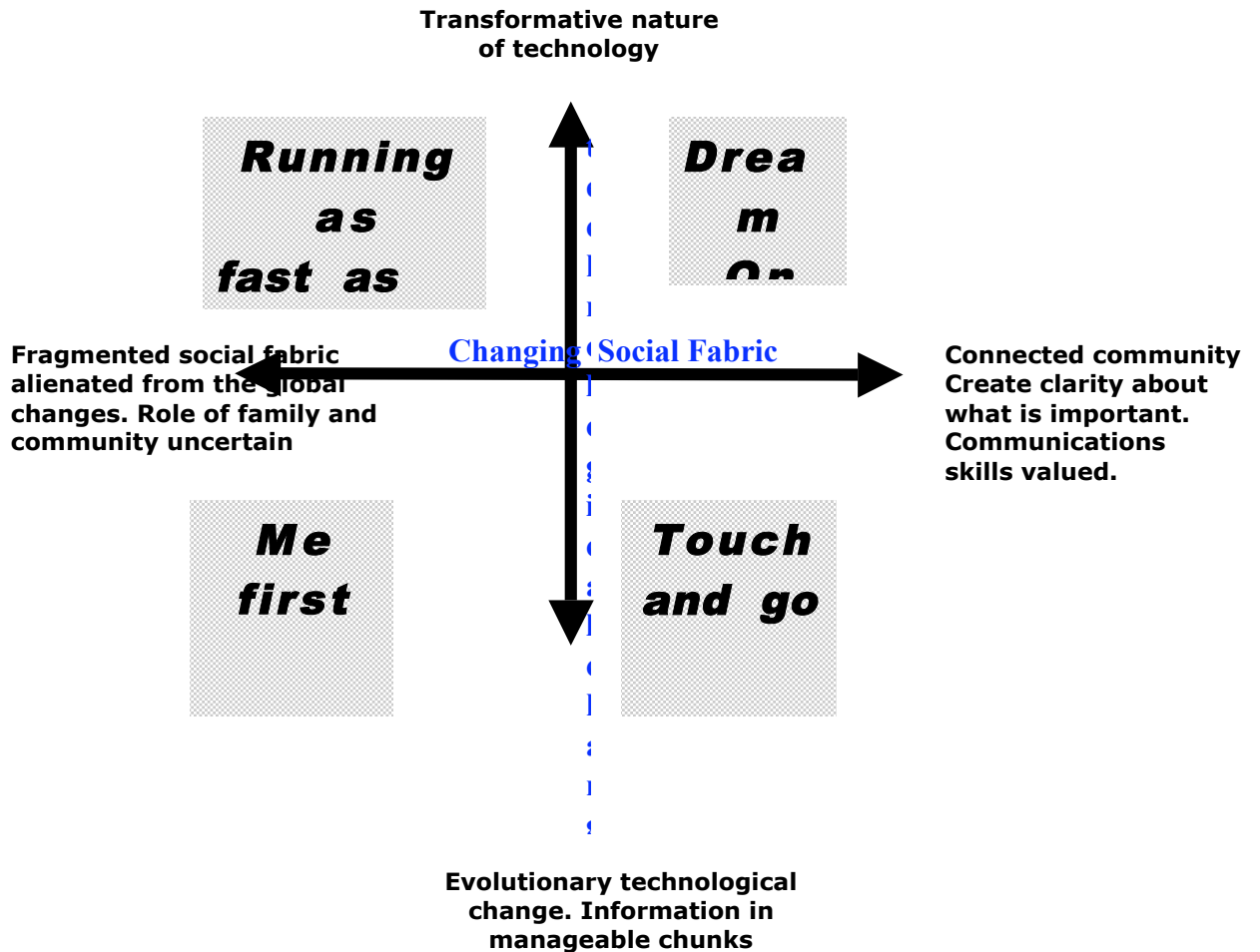
<i>Driving Forces</i>	<i>Description</i>
Changes in the public education system	Fragmentation – multiple local school boards. Will there even be any buildings necessary for school kids? How will education be delivered? Needs for different skills – critical thinking, language, integrated curriculum. Home schooling on the rise. Pressures for academic achievement.
Social change and fabric	Changes in the nature of the family and community. Social structures affecting the ability of CRPS to deliver education. Different relationships in our community because of cultural shifts and so forth. (fragmented versus connectedness). Missing role of the extended family – who has the voice of the child? How to identify with the globalized world?
Economic structure	Living in a globalized world with increased competition and opportunity with jobs shifting away from North America. The basis of the Bow Valley’s business economy will change. Different jobs in the future. Less reliance on carbon – implications for education.
Demographic shifts	Global population increase - population changes in cultural make up of local and regional population. Aging local population with effects on the numbers of school age children and availability of teachers. Immigration of different cultures to the Bow Valley. Ignorance of other cultures and languages. Part time residents increasing as percentage of the population.
Natural environmental pressures	Global environmental change (collapse or amazing adaptation) leading to competition for resources. The quality, quantity and diversity of the Bow Valley’s ecosystem(s) and the relations to our economy.
Information technology	Pace of change increasing, virtual connections, “plugged in”. Changing relationships between self and technology and the changing notions of reality. Changing social skills and vehicles for communication – lack of face to face contact.
Knowledge base	Volume of information – too large to memorize – how to discern? Quantity of information, how to teach it? What

	technology to use to teach with? Changing role of the educator.
Role of First Nations	Role in the future – playing catch up now – how to get ahead of the curve? Role of family, elders, community in the future of the children and the development of their voice.

The Scenarios

The four scenarios developed based on the Phase 2 public input are in the diagram below. The story behind them appears in the following pages.

Scenario Framework - CRPS



1.

1. Running as fast as we can (top left)

1. Overview

In this scenario the transformative nature of technology drives the changes.

A strong global and Alberta economy drives towards a fast paced life with technology at the core. The oil economy has left us with enough in the heritage funds to be able to finally start on technology development of our own. We have put our funding into creating new technologies – particularly nano-technologies that are going to dramatically change how we do everything. Technological developments have spilled over to our kids and we have been able to create a new group of highly connected young people.

In the throes of a technological revolution more people can live in the beauty of the mountain valley and work from home. This technology has allowed wealth to be accumulated and has placed extraordinary pressures on the education system and parents expect their children to keep up with the constant changes.

A polarized social structure contrasts three groups: a large aging and wealthy population; a dynamic globe-trotting young professional set; and a poor, transient service-work population. Public community participation is minimal. Physical and social meeting places are sharply divided.

2. The Story – Looking Back from 2030

We have become a Province connected to the rest of the world in ways we could never have imagined in 2008. Our technological innovations have begun to make as much impact in the world as our oil sands did at the beginning of the century. All of this is good for our students who are learning to be citizens of the world they are connected to. It does however mean that little attention is being paid to family and community life. Schools look very different than they used to and we are now competing for as much information as we can in order to be “up on” the world.

3. Technology Conflicts

The developments in technology brought forward an ongoing battle for resources and between community groups “for” and “against” this way of life. Some citizens embraced this new way of living and understood the advantages of being connected to the world, others worked hard to retain a sense of community and a reminder of the place they are fortunate to live in.

These conflicts spilled over into the schools. The School Administration felt a great strain on its already limited resources to be able to compete technologically. In 2012, the Alberta Government began to understand that the oil wealth was going to need to be diverted in different directions. Funds were released to develop a diversity of industry and some of the nano-technology that had been developed in the background at the universities came to the fore. There was increasing money available for those researchers who wanted to take advantage of the exploration of different technology – first in the medical arena (after all the Heritage Trust Medical Savings Fund had been a beneficiary of the oil revenues for many years) and then in the communications field. Combining these two technological imperatives began to mean that not every community needed specialist doctors. This allowed these

professional people to live in communities such as Banff and Canmore because they could work elsewhere without leaving the lifestyle they have come to appreciate.

4. Social Divides

There was little overlap or interaction amongst groups of people living in the Bow Valley. First Nations fell even further behind than in the early part of the century. The two groups of people (those who embraced the technology and those who did not) were divided while living in the same community. Their fundamental values were causing the divide. There was no social or spatial overlap as each group tended to use different places, from restaurants and pubs to stores, trails and means of transportation. No group was committed to the valley as a place. Some related to a neighbourhood, or a street or pub, but few related to the community or area as a whole.

One of the great challenges for the education system was how to provide education for a community divided? The tension between expectations of the curriculum and those parents who had embraced the new age, and those parents who were more concerned about the integration of school into their families and community caused additional burden on the teaching staff and Administration.

5. Implications for public education

In this scenario, innovation abounds as do painful transitions and inequalities.

In Alberta as a whole, substantial investments have been made, especially in disadvantaged communities, to develop flexible, state-of-the-art facilities. ICT was introduced and used extensively.

Now there are highly motivated teachers working in favourable working conditions with high levels of communications technology that allow for easy connection to students no matter where they are. In addition teachers are encouraged to spend time in research and development for better communication tools for education purposes as one of their forms of professional development. In addition there are group activities, networking, and mobility in and out of teaching for the teachers. In fact they might be in competition to teach the most connected child.

New learning institutions to serve the Bow Valley communities have emerged, and professionals (public, private; full-time, part-time) are created in what is now termed a "learning market". Choice plays a key role in the education of the child in this scenario. Choice is made by those buying educational services, and choice is exercised by employers who give market value to different learning routes.

Indicators and accreditation arrangements displace direct public monitoring and curriculum regulation.

2. Dream On (top right)

1. Overview

This is a story of the development of a commitment to create together a new future for public education in the whole Bow Valley. The main drivers are strong technological advances and an equally strong commitment to being a valley that is fit to live in, offering strong social connectivity and high quality of life.

Through *Inspiring Hearts and Minds* we have learned that drifting on the education tide would not lead us to a future that was satisfying for most of our children; that we have real choices about what we could become.

This is an institutional and governance challenge, as well as a call for personal responsibility. Early moves includes WIFI access to the internet to every inch of the valley; and the mandate to extend the School Board's planning capacity to include fore - sighting and to become a resource to the whole valley. These three actions will allow the inclusion of community members in a sustained way.

It will be a constant struggle, especially in the first decade, to hold and keep to the new attitude towards public school education. Newcomers arrive with their old assumptions. Further, it will take some time to get Alberta Education to treat us as a test bed for new ideas. First they ignore us; then they fight us. At last, they see us as an asset.

In time, however, the journey will become easier. More of us understand more deeply just what we are about and why. New technologies and organizational forms enabled more consistent participation. In addition, we are able to enhance both our sense of community and our physical environment. Of course, it does not hurt that we were able to attract funding as a significant social experiment and that we are held up in many circles as a positive example to be emulated. Our success becomes self-reinforcing, for example, both knowledge work and knowledge workers are created.

The child learns the twin values of being connected to the world and to his or her own community. The communities in the Bow Valley have made a concerted effort to remain connected both within themselves and between them. Part of the rationale for this is focussed on the children growing up here. A deliberate effort has been made to create a family, community and educational setting in which this twin philosophy is espoused valley wide so as to create a young person fit for the world of 2030.

2. The Story – Looking Back from 2030

Why did we worry about resources for the kids in school and how we were going to help to develop global citizens through our education system? We can see now that, in 2008, we had only a dim sense of the work that lay before us. In 2008, by the standards of the day, much was working for us. Our economic growth was strong. Alberta was prosperous. We were learning to cooperate within the Valley. Education, changing global climate conditions and the community were securely on

our radar, along with wealth creation. In short, the pressures for overt change were not huge.

In hindsight, *Inspiring Hearts and Minds* was a critical step in the right direction. One of the surprises was that the vision was not the blueprint that so many of us had anticipated. Rather, it expressed a new aspiration – a new sense of what we could do and become together over time, if we had the wit and courage to commit to finding and marking a new path for public education.

3. What a Lot of Effort it took!

Conflicts between the push from the world “out there” and the goals and aspiration of the people of the Bow Valley have taken a lot of work to sort out. We had an intent in mind in 2008 and we had to keep renewing our commitment to it as new ideas about technology, the role of education, the requirements for funding and where the jobs are – kept imposing themselves on our valley.

The work was not about not paying attention – after all along with the rest of Alberta we were hooked up to the rest of the world in ways we couldn’t have imagined in 2008. The work was about understanding how the rest of the world was functioning while remaining true to our collective commitment to maintain a well functioning family, community and educational system that held high the idea of being connected.

4. Remembering Where we live and Who we are

We knew we were fortunate to be living in Alberta. The re-elected Liberal government finally weaned the province off its focus on carbon, by taking advantage of the taxes from oil sands, coal-bed methane and natural gas (whose prices finally soared). The focus became the diversification of the economy and particularly the development of a technological Research and Development corridor focused on technology development for mid 21st century needs.

The Bow Valley was able to take advantage of this – students could learn at an early age about the technological advances. Because of its commitment to the valley, the School Administration ensured that any new learning of this nature was brought back and used for the benefit of the communities here.

At every level up and down the valley – family, school and community, this became a driving force – a truly integrated learning community if you will. It has meant the retention of the schools bricks and mortar as a learning place for all.

5. Community Development

This sense of connectedness did not come about overnight. There had for many years been natural divisions between the communities in the Bow Valley, which had to be bridged. After all we have a natural environment we all love dearly and the increasing visitor numbers had brought us together before – so why not become united around something so important as the impacts of the burgeoning technology industry on the education of our children.

Many valley wide meetings were held. These were not just in big forums as in *Inspiring Hearts and Minds*. The meetings took place at the kitchen table, around the campfire, in meeting rooms and school classrooms.

Sustained dialogue became a way of life – if we had a community problem to deal with, an environmental issue to discuss, a decision by Parks Canada that would ultimately affect all of us - we considered our joint voice to be of prime importance in determining how to deal with all of these issues.

6. Implications for Public Education

The large majority of schools in the Bow Valley have earned the label "learning organisations" with strong knowledge management and extensive links to the families and communities of the Bow Valley. There are extensive shared responsibilities between schools and other community bodies as sources of expertise, and tertiary education. Professional teachers are not the only sources for information and learning. Involvement in the learning organization by other community members is encouraged. The learning organization environment of the public schools has spawned a wide range of organisational forms and settings, with strong emphasis on non-formal learning. Transformative technology – ICT used extensively, especially for communication and networking - has helped this to happen.

Schools enjoy widespread recognition as the most effective bulwark against fragmentation in society and the family. They are defined by collective and community initiatives addressing education and other issues facing the Bow valley. Because the family and community connections are so strong, schools act in a supportive role that allows schools to mitigate fragmentation.

In the learning organization, old assessment tools make little sense. There are flourishing new forms of evaluation and competence assessment.

Because the Bow valley has taken this stand on connecting the student, family, community and education, there are stronger links between K-12, post-secondary, continuing and adult education. The University of the Bow Valley received its charter in 2026 and the first class graduates in 2030.

The varied arrangements and conditions for learning have resulted in high paying teaching jobs and flexibility. The addition of a continuing education facility has helped to ensure that a core of high-status teaching professionals has been retained.

3. Me first (bottom left)

1. Overview

This scenario is driven by our inability to recognize our descent into impoverishment and has resulted in a slow disintegration of the communities in the valley (even Banff). We face tough choices. There is an increased spread between the haves and have-nots, and increased local conflicts as each seeks his/her own way/interest – witness as an example - the separation of the expensive homes of the part time residents in Canmore. Fragmentation has led to the need for high security for the rich and high crime for the poor; and to high distrust for all. The provincial economy is deeply struggling as Alberta has not had enough foresight to put in place economic drivers to replace the oil.

The primary cause for the slow decline might have been economic but we did not collectively see the weak signals. Because we were relatively fragmented in the Bow Valley, there were no common meeting places or processes to discuss these issues.

The environment and the community are cannibalized in the name of necessity and a short, narrow view of life prevails. There are declines in everything – especially schools unless you can pay for them, and who wants to be schooled here anyway: the rich send their kids to private schools on Vancouver Island. Social services and community facilities slowly degrade, the population declines as those who can, seek a better life elsewhere, and the local economy slowly falls apart.

2. The Story – Looking Back from 2030

How did we let it slip away? – our sense of community, our respect for the environment, our desirability as a cohesive community welcoming to all. That question plagued us in the early 2020s, and by 2030, it has become clear.

It turns out that we were not any worse than other communities around the world. But we did suffer from a widespread human affliction - that of continuing to behave in ways that once worked for us long after the conditions that made them successful had changed into a fundamentally new set of conditions. There is even a name for it – *overshoot*. Just like a frog that is slowly being heated in a pot until it dies, we did not notice the weak signals that our situation was changing enough to warrant new responses. We just tried harder to make the things we already knew how to do, work for us. We know now that we should have been putting our energy into adaptation strategies, rather than assuming continuity.

It is hard to blame ourselves. After all, in 2008 when we started to think about education for our children in the next 15 years or so, none of us was equipped to notice, let alone respond to the slow but profound changes that would in time challenge our ways of living. We simply missed the fact that a new set of conditions which required new ways of living, were sneaking up on us.

By the time enough of us came to realize what was happening to us, it was far too late to avoid the place in which we now find ourselves.

3. Leadership and Governance

We wanted to believe the promises of an easy future made by our leaders. The trouble was that we did not want to hear hard news, anymore than our leaders were willing to speak it. While we told ourselves we were doing heroic work, we conspired together to make sure the truth was not told, and if told, seen as not credible.

In the Bow Valley, *Inspiring Hearts and Minds* failed as a futures planning project for public education. We did not take the opportunity to engage our minds or our imaginations about what we could become. We wanted comfort now and elected those who promised it to us. We were among the vast majority of North Americans who simply could not bring ourselves to believe that there were good reasons to fundamentally alter our view of education and educational delivery as we had always known it.

And, to be brutally honest, we were not willing to do the hard, frustrating work that we sensed it would take to make significant change happen.

4. The Disintegration of the Social Fabric

The story of the disintegration of the social fabric was slow, not well-recognized or understood, and ultimately fatal to life in the Bow Valley as we had known it. At first, the increasing prosperity was welcomed. Rising house prices drove up the value of our investments. But it also meant that our response in almost all areas was small and slow. We made meagre attempts to sustain our social infrastructures and to re-knit the social fabric in the Bow Valley. In hindsight, all of these efforts were too little, too late.

In our defence, there were some spirited efforts in 2008 - 2009 to get the province to let us be a site for some pilot initiatives in educational governance to test new directions for the future. But these were futile. Neither social nor educational innovation was truly on our radar.

Erosion of our social fabric through the steady increase in the price of housing meant that most of the children who were born here could no longer live here. In one blow, local knowledge was lost and the average age of the population was increased. Many of those who came here were older and mostly interested in a tranquil place in which they could enjoy their own lives. Having neighbours who were real neighbours did not interest them; all that they asked was they were not disturbed. A sense of community was not cherished. School age children and young families were not seen as worth supporting.

5. Technology

New innovations in technology were slow to take hold in the Bow Valley. Developments in new ways of communicating may have been happening elsewhere but we were slow to take advantage of these as well. This was partly due to the restriction of resources caused by the downturn in the economy; and partly due to the lack of a cohesive local plan for the integration and use of new ways of communicating.

As long as those who could afford the vacation homes or the vacations in the Bow Valley had connections, that was enough. Indeed some visitors came to view it as a blessing that technology had not advanced as far in the valley – it made it a more quaint and relaxing place to come to visit.

In the earlier part of the 21st century, the School Administration for the Valley had felt a strain on its already limited resources due to the demands to compete technologically. Now it did not seem to matter so much any more. The administrative challenge was to have enough children to keep the schools open – no matter what the state of the technology. There wasn't enough flexibility to face and manage these challenges anyway.

6. Transformation

This state of affairs could not last – the new Chair of the Public School Board (CRPS) took a stand and decided that the “Me First” mantra was not good enough. There had to be a way to unite the communities to create a collective vision for education in the Bow Valley.

She was booed out of the first Town Hall meeting she arranged, but was not deterred. She found a few people of like mind, although it was difficult to knock at the doors of the “dark windows” in Canmore particularly. Slowly this small group from the MD of Bighorn, Banff, Canmore and the Stoney First Nations gathered force and began to create a larger group which began to discuss the future of their valley and the education of their children. The Bow Valley-ists emerged.

7. Implications for public education

There are powerful, bureaucratic educational systems in place, unable to see the weak signals. Because they are resistant to change, they move only in an evolutionary way. Schools are knitted together into national systems within complex administrative arrangements. This causes a uniform approach to education – which in a slow technological world could work.

Because of the entrenched response of the bureaucracy, the market has significantly extended into education as governments encourage diversification along the lines of “haves and have-nots”. People feel disenfranchised – the teachers, the students, their parents and the School Boards and Administration.

Governments withdraw from much of their direct involvement in schooling. Even though the Bow Valley-ists had made representations to the provincial government, there is no provincial support for innovative community-driven leadership initiatives as there are no major increases in overall funding.

The “Me First” generation is asking for a diversity of education mechanisms but traditional schools survive. The public has high expectations of schools, and there is a continued drift toward the extension of schools' duties that further stretches resources. This works towards embedding a distinct teacher mind set. The teachers have had to protect themselves from this “creep” and some have civil service status and strong unions. With fewer revenues there is a problem with professional status and rewards.

A major crisis of teacher shortages is triggered by a rapidly ageing profession, exacerbated by low teacher morale, buoyant opportunities in more attractive graduate jobs and a resistance to change rapidly.

This circle of retrenchment and conflict or emergency strategies spurs innovation and change - perhaps a revisiting of the work done in 2008 in *Inspiring Hearts and Minds* is called for?

4. Touch and go (bottom right)

1. Overview

This scenario focuses on the power of community in the face of radical economic change. The economic collapse causes shifts in the development of technology and creates challenges for the community and for education. Oil demand softens and prices fall. Alberta's rampant growth collapses in a state of shock. Demand for second homes in Canmore plunges. At the same time slow growth affects tourism across the valley. Residential and commercial real estate prices plateau then fall. Development grinds to a halt.

Initially, reduced development pressure eases the demand on municipal resources. But eventually falling market prices puts pressure on tax revenues. Municipalities take leadership in cutting costs but this impacts both social services and maintenance investments in major facilities. The same applies to the School Board which is also affected by the shift in the economy. Lack of resources, however, has a toll and school facilities deteriorate.

Many residents are initially relieved at the slow down in growth. But as the impacts, particularly the social impacts, become more obvious, a groundswell of concern arises demanding change. Neighbourhoods, community groups, churches, schools and other groups and institutions undertake projects from food donations to park clean-ups to trail maintenance to elderly support. The business community also responds.

Lifestyles become more "basic". Some adapt to reduced opportunities by seeking or creating multiple jobs. Some commute to Calgary. Others reduce costs and simplify lifestyles. Biking and walking increase. New entrepreneurs from knowledge-based to craft and art emerge – all attracted by the lifestyle of health, recreation and simplicity.

2. The Story – Looking Back from 2030

We thought we were living in lotus land. The valley had reaped the benefits of all the people who wanted to come to the Bow Valley either permanently or temporarily. And the crunch came relatively quickly – so it stretched our communities to work together on all matters of importance.

By 2030 the Valley has experienced and survived another boom-bust cycle. New, more stable communities exist with a strong sense of place and self-reliance, and local control has emerged. Challenges remain. Although pressure on the environment has fallen from the days of rapid development, new challenges from the lack of resources have emerged.

We have been able to sustain our sense of connection across the Bow Valley. We have worked hard to do this with sporadic successes. Part of the sporadic nature of success has been due to the need for family members to work at several jobs to earn a living. We have realized the importance of a Bow Valley-based regional approach to sustaining ourselves, our families and our communities. For example, the 100

hundred mile diet has taken hold in the valley – it has become the 55 km diet. Through sharing resources, collaborating on services and initiatives like the creation of collective hydro-ponic gardens, the people in the valley have been able to have some sense of self-sufficiency. This has freed up enough time to jointly work on issues of real importance – the creation of a truly sustainable valley and valley wide innovations in networked education.

3. We are all part of Mother Earth

So what if we don't have the extra money in our pocket for our retirement we thought we would because we had relied on the increasing value of our properties to fund that part of our lives – we have each other. Corny as this sounds we are able to use our ability to think and work together to recreate communities in the valley that are more in tune with ourselves and our environment.

Others have done it before us – perhaps not on such a wide geographic scale. But we have had practice – just look at how we developed a common understanding in 2008 of how we want our kids to be educated.

Other joint ventures followed – the creation of a sustainability charter for the Bow Valley, the development of an economic strategy for the area and so forth. These projects came about after we discovered we could work together even if we have different views. Our skill level in this area is unsurpassed in communities in Alberta. Indeed we are looked on as something of a triumph.

4. Technology as servant

Technology has served us well. We are using technology to support us, but it does not drive us as frantically as it used to. We have been able to make use of our connections to the web to learn from elsewhere in the world. Communities in other cold places such as Sweden and Norway have taken on the task to create success out of what seems like failure. They have created a variety of different types of communities to meet the challenges and in doing so have become the architects of their own lives.

Technology still plays a role in the communities of the Bow Valley – indeed it is a useful means to remain connected. It also helps to establish and sustain some of the new education webs and networks that are formed around community activities. For example, students working in the hydro-ponic “gardens” get to display their knowledge of genetics and botany.

5. Conflicts

Conflicts occur any time but can be particularly problematic in the time of diminishing resources. No matter how well connected you are, in time of crisis it can turn to be “all about me” quite quickly.

How to sustain the economy, social fabric and education of our children under circumstances that are as constrained as these seem to be requires a lot of fortitude and constant feedback as to the value of working together.

The leadership needed to help bring this about can come from different sources. With

the focus on the Bow Valley as a whole, we learn from each other in ways we haven't before. But we are not used to this and sometimes it is a little difficult to accept the wisdom of a child or a First Nation.

6. Implications for public education

Valley-wide dissatisfaction with schools and new possibilities for learning leads to some of the schools being abandoned or turned into community gathering places. In fact the gym at the high school makes a terrific greenhouse!!

Learner networks have been established, hence the reason for the disappearance of some schools. These learner networks are now simply part of the broader "networked society". These networks are based on diverse parental, cultural, religious and community interests - some very local in character, others using distance and cross-global networking.

Small group, home schooling and individualised arrangements have become widespread. Because we now know the needs of our children in terms of educational requirements, we are able to set up joint home schooling sessions where the areas of interest overlap. This has been possible because we have exploited powerful and inexpensive ICT.

All of this "do it ourselves" has caused a substantial reduction of existing patterns of governance and accountability.

Specific professionals called "teachers" disappear. Demarcations - between teacher and student, parent and teacher, school and family, education and community - blur and break down as new learning professionals and support systems emerge.