"Skills have become the currency of 21st Century economies" Andreas Schleicher, OECD Education Vice President

Methodology

The Grad Dialogue Consultations in the Kootenays were a collaborative effort, involving staff from School Districts 51, 20, 10, 8, 5 and 6. District staff facilitated conversations with principals/vice principals, school staff and students and forwarded the results to the Regional Facilitator.

The Regional Facilitator held public forums in five of the school districts. In addition, separate consultations were held with the following focus groups:

- a) School trustees
- b) BCSSA Kootenay Chapter
- c) West Kootenay Teacher Education Program
- d) Students and staff at Selkirk College and College of the Rockies
- e) Business representatives

In addition, some individuals and groups submitted responses via email.

The multiple responses to the five questions were collated and themes identified that captured the flavor of the written responses as well as the sharing and dialogue in the consultation sessions.

Summary of the Responses

In the public forums, conversation and dialogue was fulsome and thorough and it was noted that all the sessions went beyond the 2 hours planned. Conversation was engaged and lively from beginning to end, indicating high levels of interest in this topic.

Forum participants expressed strong support for the BC School System. It was recognized that we have a system that is strong, that our students do well, and is envied by many educators around the world. The concept of the Educated Citizen was strongly endorsed. However, it was noted that it was very difficult to clearly identify the links between our current 80 credits of graduation requirements and the Educated Citizen.

The most clear trend was for the intentional and sequential development of a number of competencies. The concept of the five cross curricular competencies was strongly endorsed, along with a variety of other skills and attributes. It was felt that these

competencies not only were needed to be "taught" and developed, but assessed and communicated to students and parents.

There were many calls for increased flexibility, not only in the type of educational experiences students take part in, but for different methods for engaging in and demonstrating learning.

Another clear trend was for increased school-community connections, and for both extending the learning of students beyond the walls of the classroom as well as bringing members of the community into schools.

Relevance, meaning and authenticity were also clear trends. The use of real life, authentic projects and problems was seen as a necessary focus in our system.

Participants were also clear that, while they support shifts and changes in our system, they do not want us to lose our focus on basic skills/attributes such as literacy, numeracy and citizenship. It was clear that our system is not one in crisis, and that change needs to be managed in a reasonable and respectful manner.

Question 1:

What do you think are the core or essential things all students should know, understand and be able to do by the time they leave secondary school?

In the public forums, a number of trends emerged, which could be generally divided into the following areas:

1) Skills/Competencies

By far the majority of "essential things" identified were competencies that forum participants felt were important for success in later life. The most common competencies identified were:

Functional Literacy – this was noted in every response. Literacy was seen by the groups as:

Reading – high levels of comprehension, the ability to read large amount of information and summarize, analyze and interpret the main ideas. The ability to read to learn.

Writing – the ability to write coherently, efficiently and clearly.

Information or Technical Literacy – the ability to research and find information, judge it's merit and source, and use in ethical and appropriate ways.

How to Learn – the skills needed to be a lifelong and engaged learner

Numeracy – forum participants identified basic numeracy skills of number operations, ratio, proportion, measurement, fractions, and estimation. Math programs should be clearly and closely tied to "real life" problems and applications. There was a great deal of conversation of the focus on "higher level math" and a sense that it was of little value for most students, yet caused a high level of anxiety. Forum participants were hopeful conversations were occurring with post secondary programs regarding the use of math as a program screen.

Communication – the ability to communicate in a variety of forms and genres –public speaking, writing in various forms, multi-media and electronic communication.

Critical Thinking/problem solving – along with literacy and numeracy, critical and divergent thinking was the most commonly quoted skillset. The ability to solve real life, complex problems and develop questions that led to divergent thinking was a clear trend.

Transferable employment skills – this was another commonly identified skills set -workplace readiness, job search, people skills, resume, how to keep a job. Essential skills often quoted.

Personal Management and Social Skills – time management, self discipline, organization, conflict resolution, ability to work in collaborative groups, ability to self evaluate and set goals.

Relationship Skills – ability to build and maintain respectful relationships.

Leadership Skills were also quoted by many participants.

2) Personal Attributes/Qualities

Resilience and Perseverance – this was the most commonly quoted personal attribute. It was felt by forum participants that the school system should make a concerted and intentional effort to develop resilience. This was strongly echoed by post secondary instructors, who spoke of the challenges many of their students have when they make the jump from high school.

High level of citizenship – forum participants felt we were generally doing a good job of this, but that it should have a greater emphasis. Related to this, many participants mentioned high degrees of cultural sensitivity and global awareness.

Desire to learn – in a world in which education and learning is seen as a lifelong endeavor, this was also seen as crucial.

Creativity – all groups identified creativity as an essential attribute.

The following are a list of other attributes mentioned in many of the forums:

Strong Work Ethic

Flexible and adaptable

Empathic

Self Confidence and Optimism

Tolerance and Respect for Others

Commitment to an active and healthy lifestyle

3) Knowledge

Financial Literacy – this was by far the most common theme related to knowledge or content. Loans, mortgages, budgeting, personal finances and goal setting.

Career Awareness – enhanced knowledge of career opportunities, post secondary programs and global employment trends

Environmental Stewardship – knowledge of how to make the planet sustainable.

Government – knowledge of how our government works, democracy and responsibility of our citizens

Personal Health – the knowledge needed to lead healthy, happy, productive lives, but beyond physical fitness and nutrition to include issues related to emotional health.

After the public forums, follow up discussions were held with college instructors, business representatives and college students as there were few of those in the public forums. These were among the most intriguing conversations, as those groups pointed out that high school graduates take two routes – post secondary education or the world of work. They felt that post secondary education and work should be seen as the "clients" of the school system and that the skills, attitudes and knowledge needed to be successful in those two pathways should be a focus of the K-12 system.

College instructors believe the school system should focus on developing competencies, and that the current focus on content acquisition in secondary schools is not as important as intentionally developing skills. They feel the K-12 system needs to focus on teaching kids "how to learn". They especially noted:

- In college, students are taught from a conceptual, rather than a content, perspective. Many of the students they work with want "the list to memorize", but instructors want them to think and analyze and understand the concepts deeply. They also want the students to be able to practically apply the concept in their field of endeavor, such as nursing.
- Instructors from all programs felt their students lack the practical numeracy skills they need for their programs. Ratio, proportion, estimation and measurement were needed, not algebra and calculus.
- Instructors feel their students need to able to have higher levels of reading comprehension, and the ability to analyze, summarize and synthesize from large amounts of informational text, then write in a clear and coherent fashion to communicate their learning.
- Critical thinking were seen as a crucial skillset in college, and felt that students coming into college are deficient in this area. They said in college there is an acceptance that there is not "one truth' or correct answer, but a wide variety of possibilities, and that they prize divergent thinking.
- College instructors also felt the public school system really needed to work on developing resilience, perseverance and the ability to deal with stress and anxiety, as this greatly inhibits their learning.
- College instructors wanted to pass the message on to high school teachers that covering all of the learning outcomes in a content-based course was not crucial – the development of reading (of informational text), writing and critical thinking skills was more important.

College students felt they had great experiences in high school, but now that they were in post secondary education, felt that there could have been a different focus for them. Of note:

- All said "we wish you had taught us to be critical thinkers; we really need that now"
- Financial literacy should be a big focus in school
- Felt that they were "spoon fed" in high school, and that they needed to be taught the skills to be independent learners
- The said the focus on memorizing content that they saw in high schools is way different than in college, where the emphasis is on thinking and understanding concepts.

- All felt the schools should focus more on developing the skills they needed to be successful in college.

Business leaders felt the K-12 system should focus more energy on those students who enter the work force directly from high school, as opposed to those students heading to university. Felt the school system should develop:

- Essential skills quoted the nine essential skills developed by Skills Canada
- Job readiness kids need to know what to wear, how to work, not to text all the time etc.
- Critical thinking and problem solving most students will be hired in small businesses, where there is a need for people to do many things and help create solutions to challenges.
- Collaboration, team work, flexibility, dealing with the public and getting along with other employees was seen as very important
- Said basic numeracy skills were really important
- They said the school system should stop encouraging university as the best option, and put time and energy into promoting such things as the trades and technology.
- They also said schools had to impress on students that they would need to continue to learn no matter what job they got.
- Said kids are really tech savvy now.

These follow up conversations really did stress the need for better communication and dialogue, especially between high school teachers and college instructors, as the assumptions that both groups have about what the other group wants are not very accurate. For example, high school teachers commonly say they feel stressed about the volume of content in their courses, and the need to cover all the learning outcomes "because that is what the college and universities expect". College instructors say the content is not important – send us kids who can read, write and think critically and we can teach them the content they need.

Question #2:

Beyond the core, how could pathways for choice or exploration be provided?

It should be noted that many of the opportunities identified by forum participants, including many educators, already exist in our schools. Many of them would fall in line with the enabling policies embedded in the 2004 Graduation Policy, such as IDS,

External Credits and Equivalency. This would point out that many of these policies are not understood or utilized to their fullest potential in the school system.

While there were a variety of options identified in the discussions of this question, it should also be noted that many participants wanted to see a shift in the culture of our schools to one in which all pathways and programs be given equal importance and prestige. Many participants felt our current system puts too much emphasis on traditional academic courses and university preparation. Having said that, all participants felt that it was important for strong academic programs for those students who choose them.

Forum participants were clear that there needed to be flexibility for students to shift between pathways throughout high school. There was concern that students may choose options at one grade, and then be "stuck' in that route.

In addition to those programs that are linked to current enabling policies, the following were evident in most of the responses to this question:

Trades Training – participants felt that the current trades opportunities (ACE-IT and SSA) should be enhanced and efforts should be made to improve their profile and importance. Many participants feel that the "university track" is still encouraged the most and that trades are seen as an option that is of lesser value. It was felt that students, educators and parents needed to shift this attitude.

Meaningful Work Experience – it was felt students should be offered more and varied types of work experience that would allow them to truly see what different types of works are like. Many participants felt that all students should be required to have an extended type of work experience, far more that the current requirements in Graduation Transitions 12.

Community Connections – if was felt that there should be many more opportunities for students to learn from and with members of the community. This included mentorships, apprenticeships, artisans in residence, connections with Aboriginal Elders and many others. A clear trend in this case was forming closer school-community connections, and recognizing that many members of our community could provide very valuable learning for our students. It was felt that credenials should be granted for engagement in community activities, such as coaching and community theatre.

Post Secondary Connections – as with community, it was felt that students would benefit greatly from having opportunities to spend time at post secondary institutions,

and explore programs they may be interested in. This could be accomplished through enhanced transitions agreements and opportunities for "program shadowing". While there are opportunities for students to visit colleges, for example, many feel these are simply too short and somewhat superficial.

Passions – another clear trend was providing students with the opportunity to explore their passions and interests in more in-depth and meaningful ways. This could be accomplished through expanded us of IDS, inquiry, community mentorships and such programs as Navigator.

Service Learning – many participants talked of the value of service learning and would like to see expanded opportunities for this, and greater encouragement for these projects at all levels.

Project Based Learning— many participants felt that students should be involved in more interdisciplinary projects that pose real life problems and provide students with the opportunity to make meaning of their learning.

In order to provide the opportunities listed above, it was felt that schools would have to become much more flexible in their scheduling. Examples of programs in which timetables were radically altered, and where students spent time in the communities were often cited.

Question #3:

Research is underway with a focus on the following five cross-curricular competencies:

- a) Communication
- b) Critical Thinking
- c) Creative Thinking and Innovation
- d) Personal Responsibility and Well Being
- e) Social Responsibility

How do you think students could demonstrate these competencies?

General responses

The responses from this diverse group of people were interestingly very similar and trends were easily pulled from the evidence. It is clear that the people who attended and/or chose to respond to the questions are looking for a change in grad requirements that reflects these and possibly other competencies. Students and adults alike were aligned in their responses, requesting more authenticity and flexibility in the school system.

Trends:

Flexibility

Recognizing that our students are multi-dimensional, there was a strong request for flexibility in the way students demonstrated their competencies. Ideas given were interviews with students, parents, mentors, e-portfolios, panel demonstrations, teacher evaluations, ongoing mentorships, student-collected evidence and community demonstrations

Although there were many examples given, the big ideas of flexibility were around "real" projects -- cross disciplinary demonstrations and integration of all competencies.

Student involvement and ownership

Involving students in the decision making was another clear trend -- specifically student involvement in choosing, organizing and assessing projects for demonstrating their competencies

Authenticity

Many of the comments referred to 'real' projects, deepening the learning on a given topic, community connectedness, integration of projects to create meaning, student choice and contribution to the community and the world.

Specific Competencies

Communication

There was strong support for this set of competencies, with a message that there needed to be development in multiple forms of communication. An increased focus on oral presentations and performance based skills was noted, along with web design and demonstrations while maintaining a focus on basic skills such as writing.

Critical Thinking

Critical thinking was the most common set of competencies identified throughout the consultations. It was felt opportunities for students to learn about the BIG ideas of how the world works - politics, culture, economics, geography, etc were important, rather than focusing on the facts. It was stressed that a critical approach to dealing with information, looking at all sides of an issue and learning how to analyze, interpret and summarize information.

Creative Thinking and Innovation

It was felt students should have opportunities to be involved in real life projects and that creativity needed to move beyond a focus in the fine arts. Creativity in business and scientific research were specifically mentioned.

Personal Responsibility

Personal responsibility should have a focus on goal setting, follow through and self evaluation. It was felt a portfolio would be the best way to showcase all of these, with a focus on responsibilities in school, home and community. It was felt that financial literacy should be linked to personal responsibility.

Social Responsibility

A lot of ideas were given in this area, focusing on meaningful involvement within the home, school and community. Volunteer work, involvement in community groups, collaboration in team sports, leadership camp, community services. Community connected programs that are student driven were mentioned by many individuals.

Question #4

How could student learning be communicated to:

- a) Students
- b) Parents/Guardians
- c) Post secondary Institutions/Employers

There was a general consensus that the current system of reporting could use some improvement. While the use of grades and percentages is understood by students, parents, and post secondary, it was felt they simply do not provide enough information on exactly what the student knows and is able to do, what they need to work on and how the learning could be supported at home. There was strong support for more meaningful comments and general consensus that percentages were a questionable mechanism, and were mainly used for universities to screen large numbers of applicants. There was good support for replacing letter grades with skill progression reports.

There were several overall trends that were related to reporting to all three groups:

 All participants liked the concept of changing the focus from "reporting" to "communicating". They felt the current system, in which reports are a huge, time consuming event, was often not effective in giving meaningful and timely information. They felt that a variety of strategies could be used to accomplish

- this, such as regular email communication, wikis, programs that allow parents online access to assessment tasks and different types of conferencing. They felt this process would support the improvement of learning more than a summative report.
- 2) Most participants felt that all students should develop a portfolio that would contain a wide variety of information – writing samples, teacher feedback, self assessment, videos of performance and other artifacts that the student felt were important. It was clearly felt by many that the portfolio was the clear choice for a communication system which could demonstrate student progress in the core competencies, such as critical thinking, communication and personal responsibility.
- 3) There was strong support for a commitment to reporting on the cross-curricular competencies, with a rubric or performance standard for each one, along with teacher comments and student self assessment. There was a clear desire for some type of developmental progression, similar to what is there for swimming lessons. It was felt there should be very clear definitions and descriptions of the skills for students and parents.
- 4) There was a feeling among many that there should be more emphasis put on reporting such things as attendance, work habits, working up to potential, and documentation of such things as community and volunteer involvement and reference letters.
- 5) Students felt that different forms of social media, such as Facebook, might be used to help communicate learning.

For the specific groups:

- 1) Students it was felt that students should be more actively involved in the communication of learning through parent/teacher/student conferencing and electronic forms of communication. Summative reports, when given, should have more meaningful comments and teacher feedback that include how the student can improve learning. Reports should include how they are doing at the cross-curricular competencies, and there should a shift away from letter grades to some type of skill/competency progressions.
- 2) Parents as with students, parents should be more active participants in this process, through conferencing, and the opportunities for ongoing communication, such as conferencing. Parents clearly want to see such things as attendance, work habits and skill progressions.

3) Post secondary – while it is recognized that universities use percentages to select students, and that may be the only possible way to process thousands of applicants, many people felt the current transcripts do not provide enough information to the institution. It was felt that portfolios would provide more meaningful information, as many people feel that marks in high school courses are not the best indication of suitability for many post secondary institutions. Interviews were also suggested, but again it was noted that for most university programs, this might not be practical, given the number of applicants.

It should be noted that a great deal of education would be needed with all groups on changes in our reporting systems, given that the tradition of letter grades, percentages and formal, summative report cards is an ingrained part of school culture in BC.

Question #5:

How would you design an awards program to recognize student success in a personalized learning environment?

This question sparked some very interesting debate, with the responses falling within two broad perspectives.

- 1) Eliminate the Award System -- many participants questioned the value of our awards system, and wondered why we provide a very small percentage of our graduates with financial rewards. The overall feeling of this group was that the awards themselves should be eliminated, and the funds used to reduce tuition, or to provide all graduates with some type of tuition rebate.
- 2) Maintain the Award System with Some Changes many participants felt it was important to award excellence, but that the definition of excellence needed to be examined. It was noted that, of the three current provincial awards, two of them (provincial scholarships and Passport to Education) were determined mainly by marks (while the Passport to Education does call for an expanded set of criteria, most educators in attendance said their schools selected the recipients mainly on grades). Participants felt that there should be more emphasis on citizenship, work ethic and volunteer or community serviced. It was felt more awards could be directed toward the trades, as an incentive, and that all learning pathways should recognized as being of equal value when scholarship recipients were selected. It was felt by students that they should be involved in the development of awards criteria and possibly in the selection of recipients.

A variety of issues were identified that emerged as broad themes throughout all 5 questions.

- Flexibility all forum participants expressed support for increased degrees of flexibility in our system. It was clear they did not see flexibility as more traditional course choices, but instead identified shifts in timetabling, scheduling, methods of engagement and expression and credentials for a variety of learning experiences.
- 2) Relevance of Curriculum while there was strong general support for the work being done on the curriculum/assessment framework, especially for reducing the number of learning outcomes, many comments were made about the relevance of some of our curriculum. There were several questions raised about how the essential big ideas would be identified, and whether there would really be significant change. The Math curriculum in particular was questioned.
- 3) Parent and Stakeholder Education in the conversations, it was quite clear that a great deal of conversation and dialogue would need to be held with all stakeholders to fully understand the rationale for changes and the impact on the system.
- 4) Communication with Post Secondary Institutions many participants wondered how involved post secondary institutions are in this process. There was concern expressed that changes to graduation requirements may not reflect post secondary entrance requirements.
- 5) Political Will while participants engaged fully and willingly in this process, and expressed general support for changes to graduation requirement, there were many who have been through this process before, and wonder if this process will generate the necessary changes.
- 6) Shift in Expectation of our Educators the high degree of professionalism, skill and dedication of the educators in the BC School system was continually noted. However, it was also noted that many of the changes suggested will require our educators to shift their practice, especially in secondary schools. A shift in focus from content delivery to skill development will not be straightforward. It was noted that a significant amount of time and resources would be needed for professional development in order to facilitate this shift. It was also noted that there would need to be changes in the focus of teacher preparation programs to prepare coming generations of educators for this shift.

Recommendations

While the conversations touched on many things, the writer will restrict the recommendations to those which directly impact graduation requirements.

- 1) Shift the focus of graduation requirements from the completion of courses to the demonstration of competencies. As stated earlier in this report, the vast majority of core or essential "things' identified for student to be able to know and do on graduation were competencies such as functional literacy, creativity, personal responsibility, basic numeracy, communication, and critical thinking. While it might be argued that these skills have always been embedded into our curriculum, they have not been the focus, and have often been referred to as the "unintended" curriculum. The concept of the Educated Citizen, conversations with post secondary instructors and business leaders, and indeed global directions in education suggest that a shift is required in our system from one based on the short term acquisition of content to the long term mastery of these competencies. The development of competencies must become the intended curriculum in BC schools.
- 2) Move the cross curricular competencies to the forefront of curriculum. There was strong support for these competencies and for their integration into all curricula. However, many individuals expressed concern that, unless they are given a high priority, including being part of assessment and reporting/communicating student learning, then they would continue to take a back seat to content acquisition.
- 3) Tie Credits to the Competencies. While it is acknowledged that the credit system is known and understood by stakeholders in education, it is recommended that the demonstrations of the competencies should have credits or credentialing applied to them. While there are bodies of content that are very important for all students to know, the development of competencies will not be a priority until some level of credentialing is applied to them. These credits should become part of the official "transcript" of a student.
- 4) **Develop performance-standards-like developmental rubrics for the competencies**. In order to assess/report/communicate these competencies, there would need to be some type of developmental sequence developed.
- 5) Make the development of a portfolio mandatory for graduation. The most common form of tracking system for the competencies suggested by participants was an e-portfolio. The portfolio would contain many pieces of evidence of growth and reflection for the student, and would be individualized to showcase the passions and interests of the student, as well as the demonstrations of the competencies. While many districts use a portfolio approach to Grad Transitions 12, this is done in the final year of school. The portfolio should be K-12.
- 6) Ensure that the work done on changes to the curriculum/assessment framework reflect the proposed graduation requirements. The proposed

graduation requirements should form the base for all curriculum revision and changes to the reporting/communication process. The big ideas and curriculum organizers should reflect the most important things students need to learn, and it should be obvious to all the links between those ideas and the grad requirements.

7) Make bold moves, instead of the tinkering seen in previous iterations of grad requirements. The graduation requirements in BC have not changed significantly in many decades, and are really not much different than those of the 1970's. While many enabling policies were introduced in 2004, they have not been utilized, mainly due to the fact they were options, not expectations. In reality, other than isolated pockets of innovation, secondary school timetables and program offerings do not look much different than they were many years ago. Throughout the world, systems are responding to the call for a set of student outcomes that reflect the complex and ever-changing world they will be entering.

BC has all of the ingredients to be the best and strongest system in the world – an excellent work force, strong leadership, supportive parents and an economy which, on the global scale, is relatively strong. In order to do that, we must make a conscious choice to lead the world in innovation and change, rather than follow at a distance.