**Personalized Learning in the 21st Century:**

**Initial Thoughts for Discussion**

**DRAFT**

**Question – Overall Document**

**What are your initial thoughts/feedback on the concepts presented in this document?**

**The high quality of British Columbia’s education system is internationally recognized; BC continues to have among the best results in the world on international assessments – yet we know we can be better. In BC and around the world there is a growing disconnect between the reality of young people’s lives and their learning experiences. Globalization, demographics and rapid technological advancements are reshaping the way learners interact with the world. The education systems of the 20th century are no longer meeting the diverse needs of 21st century learners.**

**Many efforts to personalize learning for learners are occurring in BC schools and school districts. The challenge is these efforts are not evenly distributed across the province. Deeper understanding, co-constructed with all educational partners, as well as ideas for “scaling up” are needed if Personalized Learning is to become a reality for all our learners and if we are going to move our education system from “very good to exceptional”.**

**This discussion guide is designed to help groups and individuals in British Columbia develop that deeper understanding and move conversations about Personalized Learning from concept to practice, from vision to reality, on a province-wide basis.**

**There are five main discussion topics included in the guide. Answers to the questions as well as additional comments will refine current thinking and help set the course for Personalized Learning for the 21st Century in British Columbia.**

**WHAT IS PERSONALIZED LEARNING?**

**THE BC EDUCATION PROGRAM**

Early Years

Middle Years

Graduation Years

**STANDARDS**

Curriculum

Assessment

**REPORTING and MONITORING**

Report Cards

Effective Reporting

**SUPPORTING PERSONALIZED LEARNING**

Technologyand Systems

***Vision: Success for Every Learner***

***through Personalized Learning....***

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| **In British Columbia …**   * Every learner has the opportunity to be successful; to develop interest and passions, to get the help needed to succeed. * Every learner has a personal learning plan; it is developed collaboratively by teachers, families and the learner and it evolves over time. * Learners progress through the education program at different paces but in increasingly self-initiated and self-directed ways. * Teachers have the tools and training to personalize teaching; they are instructors, directors, guides, or facilitators, depending on the learner and the situation. * Families are directly involved in planning and monitoring their child’s learning * ??? |

***....and What Does it Look Like in the 21st Century?***

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| **Imagine an education system where…**   * Every single learner is treated as unique and their passions and interests are valued. * Excellence is valued; high standards are set for all learners and they are given the support needed to meet those standards   **Question – Personalized Learning**  **We have identified some elements of personalized learning. Are there any elements you would add? Delete?**   * All learners develop the literacy and numeracy skills needed to pursue and fulfill their dreams. * Learners develop the other skills, knowledge and competencies they need not only in school but in life. * Learners have flexibility in where, when, and how learning takes place * Families are actively and effectively engaged in a child’s learning * Technology is an enabler; it supports teaching, learning, and engagement with families. * ??? |

**Roles in the BC Education System from the Learner’s Perspective**

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|  | **Learner** | **Teachers** | **School** | **Family** | **Community** | **Province** |
| **Early Years** | * I am learning through play, from my teacher and increasingly from others * I am developing my unique character as a learner * I learn how to read, write and do math * I am learning about my world and my community | * provide me with rich learning environments and opportunities, and observe and assess my progress * guide me and my family in planning my learning * facilitate and teach me how to read, write and do math | * where I go to learn and explore my world * where my teachers support my learning * where I get to learn with my classmates, teachers and others * may be a Neighbourhood Learning Centre or have other resources for the community | * helps me develop my personal learning path and work toward my goals * receives frequent feedback on my progress * has lots of opportunities to discuss my progress with my teachers | * has safe places where I can expand my learning * has a public library where I can get information and use technology * has people who can help me as I learn * supports me in my project and inquiry-based learning | * provides laws, policies and funding * sets clear expectations and high standards for learning * supports teachers to implement Personalized Learning for the 21st Century * provides technology to support my learning opportunities * supports my teachers to be the best. |
| **Middle Years** | * I am learning from my teachers as well as others * I apply my reading, writing and math skills * I explore things in which I am interested * I am becoming responsible for my learning and planning | * guide me in applying my reading, writing and math skills to a variety of projects * provide me with opportunities to build my competencies * assess my learning and monitor my progress | * where much of my learning happens * where I get to work with my classmates, teachers and others * may be a Neighbourhood Learning Centre or have other resources for the community |
| **Grad Years** | * I know what I need to do to be successful * I work by myself and with others in inquiry and project-based learning situations * I meet with my teachers regularly to ensure I am on the right track to meet my goals. | * facilitate my learning opportunities or directly teach me what I need to know * keep me on track with my plans * connect me with people & experiences that increase my competencies | * where I regularly connect with my teachers and classmates. * where I get the balance of autonomy and structure and the support I need. * where I learn about opportunities for dual credit, community-based and work-related learning. |

**BC EDUCATION PROGRAM:**

British Columbia’s Education Program spans the Early Years through the Middle Years and into the Graduation Years. Learners are at the centre of the program; they would move through the program but not always at the same pace. All learners have opportunities to make choices, follow their passions and get the support they need to meet provincial standards for the skills, knowledge and competencies they need in the future.

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The goal is to create a single BC Education Program, through which each learner moves seamlessly, rather than three or four discrete programs. However, each stage in the program is marking by specific approaches to program delivery, taking into account the intellectual (cognitive), language, social, emotional, physical and moral developmental milestones learners pass along the way. These approaches do not start and stop at artificial boundaries and may be experiences across all stages of the program and must be personalized for individual learners.

* The first stage of the Early Years (ages 3 – 5) is characterized by a holistic approach to learning.

**Question**

**Are “grades” (roughly corresponding to age) the best way to organize learners? If not, how would we organize them?**

* The second stage of the Early Years (the primary level, Grades 1 – 3, ages 6 – 8) is characterized by an integrated approach to learning.
* Both the first and second stage of the Middle Years are characterized by an interdisciplinary approach to learning
* The Graduation Years is characterized by independent – and interdependent – approaches to learning.

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| **BC EDUCATION PROGRAM: Early Years**   |  |  | | --- | --- | | ***Early Years (3-8 years)***  The first eight years in a learner’s life are an important time, launching the journey of lifelong learning. During the early years, children’s brains and bodies are developing rapidly. Current research suggests that there are windows of opportunity in children’s development: periods when children are especially receptive to certain kinds of stimulation in order to create the neural connections and pathways that allow them to explore their physical, emotional, social, intellectual, and creative capacities over their lifetimes.  **Early Years Curriculum**  There are two stages of the Early Years: 3 – 5 years and 6 – 8 years. This is in recognition of children’s wide span of developmental changes during these periods.  Pre-kindergarten and kindergarten curriculum are organized under four Areas of Learning: Well-being and Belonging; Exploration and Creativity; Communication; Social Responsibility and Diversity. The Foundation Skills (reading, writing, oral language and numeracy) are at an emergent stage for pre-kindergarten and kindergarten learners.  For Grade 1- 3, curriculum consists of competency areasand the Foundation Skills. The Foundation Skills are acquired through an integrated approach to teaching and learning. Learners are introduced to the disciplines but this, too, in an integrated way.    The Early Years are grounded in the understanding that children’s abilities, interests, previous experiences, and desire for independence motivate children’s interactions with other people and with their environments. The Early Years offer a balance of child-initiated and teacher-initiated learning experiences. All aspects of children’s development and learning—physical, social, emotional, cultural, linguistic, and intellectual—are interrelated and interdependent. Educators recognize this and plan the learning in an integrated and holistic manner. | **Assessment and Intervention**  Educators regularly observe and assess children and “make visible” the learning occurring in all four areas of learning, as well as emerging and developing foundational skills. Research demonstrates that early intervention has more effect than later intervention.  **Question – Early Years:**  **What constitutes effective learner intervention in the early years?**  ***The Early Years will:***   * provide learning experiences that are responsive to children’s interests and passions * enable children to learn in relevant, meaningful contexts (e.g., through project-based and collaborative group work) * integrate learning within play-based explorative environments to foster inquiry- and problem-based approaches and making connections * support children to develop abilities to communicate their own thoughts and feelings, and to listen to, acknowledge, and empathize with the thoughts and feelings of others. * help children to develop self regulation skills and resiliency * support children to develop their Foundation Skills (reading, writing, oral communication and numeracy) over time through developmentally appropriate practices * provide opportunities for children to build relationships, to learn about their own heritage and culture and that of others, and to recognize the connection between their own actions and the wider world * promote the acquisition of healthy habits, including daily physical activity and making healthy food choices * foster learning beyond school walls through engagement with community resources |   **BC EDUCATION PROGRAM: Middle Years**   |  |  | | --- | --- | | ***Middle Years (Grades 4 – 9)***  During the Middle Years, learners undergo important changes in the areas of intellectual (cognitive), language, social, emotional, physical and moral development.  **Question – Middle Years:**  **How should “required “and “choice”, teacher-directed and learner-directed be balanced across the developmental continuum in the middle years?**  Learners use their Foundation Skills to advance their learning in a variety of disciplines and to explore and create. They demonstrate a growing capacity for planning their own learning and are actively searching for their own personal identity. This time provides a rich opportunity for many students to explore new disciplines, interests, and passions. The Middle Years are key in keeping learners engaged in their education.  The Middle Years are characterized by:   * choices, options, diversity, differentiation, * experiential learning (project-based, exploration, creativity, inquiry-based) * interdisciplinary learning * community as a place of learning, a resource, with role models and ways to bring real world experiences into the classroom. * a balance between structure and autonomy   **Middle Years Curriculum**   * In the Middle Years, learners are introduced to the concept of Disciplines – coherent, organized bodies of knowledge and related skills. * Learners are expected to meet the required learning outcomes in the Core Disciplines - Language Arts, Mathematics, Science and Social Sciences. * Learners gain experience and demonstrate proficiency in the Discovery Disciplines (the Arts, Technology and Applied Skills, Personal and Physical Education) in ways that engage them. | **Assessment and Intervention**   * Learners strengthen their Foundation Skills and receive appropriate interventions to ensure they have these skills. * Learners take Grade 4 and 7 Foundation Skills Assessments in reading, writing and numeracy when they are ready. * Learners demonstrate proficiency in an Additional Language at Level A1.2.   ***The Middle Years will:***   * see learners develop the competencies through interdisciplinary approaches to study of the Core Disciplines and the Discovery Disciplines and through strengthening their Foundation Skills. * measure achievement in terms of meeting required learning outcomes in the Disciplines and reaching provincial expectations in Foundation Skills and Competencies; there are no requirements to allocate discrete blocks or pre-determined amounts of time to specific areas of the curriculum. * assess competencies, learning outcomes, and Foundation Skills using authentic practices, including student self- and peer-assessments. * recognize – and encourage - learning that occurs both within and beyond the school environment. * Engage learners in Daily Physical Activity, as they meet provincial expectations in the Healthy Living Performance Standards * enable learners to use Challenge, Equivalency, Independent Directed Studies and External Credentials to meet program requirement. * allow for learners to begin earning credits towards graduation. * introduce concepts of career planning as learners refine their personal learning plan. Learners begin to think about the world of work, what kinds of jobs might interest them and have opportunities to learn more about possible career choices. | |

**BC EDUCATION PROGRAM: Graduation Years**

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| ***Graduation Years***  The Graduation Years represent a stage in which students are independent learners; they “own” their learning, using skills, knowledge and competencies acquired during previous stages to learn, explore, and create opportunities.  The Graduation Years recognize that:   * Learning occurs at different paces for each learner; learning opportunities address students’ unique needs, characteristics, and abilities * Learners enhance their foundation skills, master the core disciplines and demonstrate core competencies by fostering their own passions and interests through personalization. * Learners engage in inter-disciplinary, project-based approaches to support outcome achievement. Parents and communities are actively involved in student learning. * Learners are increasing responsible for their Personalized Learning Plan, in collaboration with parents, teachers, counsellors and community.   ***Grade Levels***  In the Gradation Years, learners complete requirements at their own pace; revised curriculum with rigorous standards for all Graduation Years courses removes the need for grade levels. The Graduation Assessments support this personalized approach; students write assessments when they are ready (typically when they have completed sufficient requirements to be successful).  ***Scholarships and Awards***  The Province will recognize excellence in a wide range of learning activities through its Scholarship and Awards Program. | ***Graduation Requirements***  In order to graduate, a learner must:   * **Earn a minimum of 80 credits**   Required Disciplines – 40 credits   * + Language Arts: 12 credits   + Mathematics: 8 credits   + Science: 8 credits   + Social Sciences: 8 credits   + Graduation Project Competency Assessment = 4 credits   Students may earn their required 40 credits through Challenge, Equivalency, by completing specific Ministry-authorized, post-secondary courses or earning External Credentials.    Learner-Initiated Learning – 40 credits  Learner- initiated learning credits are earned by: completing   * + Ministry-authorized courses in the Core or Discovery Disciplines;   + completing board/authority authorized or post-secondary courses;   + creating personalized courses, including inter-disciplinary courses, based on existing learning outcomes;   + through Independent Directed Studies; earning External Credentials; completing additional Graduation Competency Projects;   + through work experience and apprenticeship programs;   + through community-based learning experiences that are part of their personal learning plan. * **Meet provincial graduation standards on each of the 4 Graduation Assessments.**    + Graduation Literacy Assessment * Graduation Numeracy Assessment * Graduation Social Science Inquiry Assessment * Graduation Scientific Inquiry Assessment |

**Questions -Graduation:**

1. **Students will be required to earn a specific number of credits in each of the four disciplines. What options for meeting these requirements should be considered?**
2. **The draft document implies that students can take any course (or combination of learning outcomes) to meet credit requirements without an expectation of progression through grade levels. For example, a student could take 2 four-credit courses currently designated at the Grade 11 level and meet the requirements for science. Or a student could take 2 four-credit language arts courses currently considered at the Grade 10 level and one at the Grade 11 level –or 3 courses currently at the Grade 12 level, in order to meet the language arts requirements. Thoughts?**
3. **Would learners who meet the proposed graduation requirements, including the graduation level assessment requirements, have the knowledge, literacy and numeracy skills and competencies needed to move successfully to future education of the world of work? If not, what other elements might be needed in the graduation program?**
4. **Does the elimination for grade levels in the graduation years support/encourage students to pursue personalized learning opportunities? OR would the same opportunities be present with grade levels intact?**

**Question – Scholarships & Awards:**

**How could scholarships and awards be allocated fairly in a more “personalized” program? How might the criteria change?**

**STANDARDS: Curriculum**

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| ***Curriculum in BC***  BC’s Provincial Curriculum underpins the BC Education Program. The purpose of having a Provincial Curriculum is to allow for equity of outcomes for all learners. By following the provincial curriculum, all learners build Foundation Skills, progress through Disciplines, and develop Competencies concurrently and in a developmentally-appropriate manner.  The curriculum acknowledges that learners construct, represent, and transform knowledge in different ways, and that learners are active, self-directed participants who are able to build on prior learning.  ***Foundation Skills***  Learners will be given a firm footing in the *Foundation Skills* – ***reading, writing, oral language and numeracy***. Attainment of functional levels of these skills is a cornerstone of the Ministry of Education’s vision for 21st Century Learning. These skills are not “stand alone subjects” but are interwoven into every aspect of a learner’s path of lifelong learning, as all of the disciplines and competencies depend on these Foundation Skills. In this sense all teachers are teachers of reading, writing, oral language and numeracy, as the disciplines and competencies depends on these Foundation Skills.  ***Disciplines***  Learners will gain knowledge and develop skills in four *Core Disciplines* – ***language arts, mathematics, science and social sciences*** – throughout all stages of the BC Education Program. At various points in the BC Education Program, learners will also be exposed to a greater variety of learning experiences as they gain knowledge and skills in the *Discovery Disciplines* – (e.g. ***the arts, technology and applied skills, and additional languages)***.  Within each of the Disciplines there are specific required learning outcomes, required topics or content. There are also statements to indicate which discipline-related skills and processes learners master in each discipline. | ***Competencies***  In the BC Education Program there are five clusters of *Competencies – (****placeholder terms****: communication and digital literacy; creativity and innovation; critical thinking and problem solving; social responsibility and; healthy living and personal well-being – need to make teamwork/collaboration more evident, etc.* ***)*** – all of which are connected and overlap. The Competencies are developed as learners become proficient in the Foundation Skills and the Disciplines and through learning experiences in the home and community.  The BC Curriculum is designed to foster an interdisciplinary approach to teaching and learning, as Foundation Skills are strengthened and applied though exposure to all of the Core and Discovery Disciplines  **Questions - Curriculum:**  “**An inch deep and a mile wide” – a comment often made about BC’s curriculum.**  **How do we “deepen” curriculum and still retain what society thinks is essential?** |

**DISCIPLINES**

**Discovery**

Communication & Digital Literacy

Creativity & Innovation

Critical Thinking & Problem Solving

Social Responsibility

***Language Arts***

***Mathematic***s

***Sciences***

***Social Science***

Physical & Personal Development

The Arts

Tech & Applied Skills

Additional Languages

**Reading**

**Writing**

**Oral Language**

**Numeracy**

**Core LOs**

**Personalizedd**

**Depth**

Healthy Living & Personal Well Being

**Core**

**COMPETENCIES**

**FOUNDATION  
SKILLS**

**STANDARDS: Assessment**

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| ***Assessment in BC***  The focus of assessment will be measuring the achievement of students’ literacy and numeracy skills and proficiency in key competencies such as problem-solving and critical thinking. In measuring success, periodic large-scale assessments and individual, on-going classroom assessment must occur in an integrated manner.  Reporting of assessment results will be a key consideration in BC’s New Assessment Framework. Reports will be made more useful for learner/family, teacher, school, district and provincial use. Reports will show how all assessments are aligned and support each other at all levels of BC’s education system.  ***National and International Assessments***  National and International assessments serve as external reference points for student performance allowing BC to compare itself to the performance of other jurisdictions and measure performance in relation to international benchmarks.  BC will continue to participate in the Pan Canadian Assessment Program (PCAP), the Progress in International Reading Literacy Study (PIRLS), the Programme for International Student Assessment (PISA) and the Programme for the International Assessment of Adult Competencies (PIAAC). The results can be aligned with BC’s provincial assessments and the BC Performance Standards, to provide an international comparison for student performance in core areas**.**  **Questions – Assessment:**  **What should provincial assessment look like in the elementary years? How could FSA be redesigned to support assessment for learning?**  **What should provincial assessment look like in the Graduation Years?**  **How can/should competencies be assessed?**  **How can we use both classroom and provincial assessment to support personalized learning?** | ***Performance Standards for Classroom Assessment and Reporting***  The BC Performance Standards are central to ongoing classroom instruction and assessment. The BC Performance Standards also play a key role in reporting results to students, parents and the BC education system and in our system-wide improvement efforts.  K-12 Performance Standards will be up-dated or developed for the following Foundation Skills:  Reading, Writing, Oral language, Numeracy.  And Competencies:   * Social Responsibility * Healthy Living and Personal Well-Being * Inquiry-based multi-competency performance standards (e.g. Media and Digital Literacy, Collaboration, Critical Thinking, Creativity )   ***Provincial Assessments***  Provincial assessments at elementary will focus on foundation skills of reading, writing and numeracy. At secondary, provincial assessments will ensure graduates meet high standards in foundation skills and key competencies.  Assessment will be more authentic, formative and helpful at the individual learner level and more meaningful at the system performance level.  New types of provincial assessments will be developed in order to assess the deeper learning, interdisciplinary approaches and individual learner choices. Technology will let assessment happen when learners are ready.  Provincial assessments will include:   1. Literacy and Numeracy Assessments in the elementary grades 2. Graduation Literacy 3. Graduation Numeracy 4. Graduation Social Science Inquiry Assessment 5. Graduation Scientific Inquiry Assessment 6. Graduation Level Project, Assessing Selected Competencies |

**REPORTING & MONITORING: Provincial Report Cards**

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| **Report Card**  The report card is a learning summary. It documents learning and progress toward achieving the provincial expectations and learning outcomes in Foundation Skills, Disciplines and Competencies, and progress in meeting personal goals. It is designed to increase learner, family and teacher engagement in the learning process through individual and group reflection and conversations to enrich the learning experience and assist the development of future goals. The Learning Summary will provide families with a tool to support learning at home.  ***Components of the Report Card include:***   * Personal information * Achievements, in terms of meeting provincial learning outcomes in foundation skills, Disciplines and Competencies   **Question - Report Cards:**  **If frequent, informal reporting of progress becomes the norm, how often should formal report cards be provided to learners and families?**   * reflections * Goals and ways to support learning * Signatures   ***Report Cards may include a range of learner-, school-, community-, family- and other assessments such as:***   * letter grades * learner work samples * record of attendance * summative assessment (referencing rubrics and performance standards) * exam results * learner, teacher and family reflections of the achievement of learning outcomes and personal goals, * other sources of assessment from the community   ***The Report Card could be:***   * standardized across the province * where possible, automatically generated from the components of a personal learning plan * integrated with Ministry data collection and reporting systems * able to capture descriptive feedback, particularly at mandated reporting times * accessible at any given time and at formally scheduled intervals * accessible online or as a printed document |

**REPORTING & MONITORING: Revised Reporting and Student Evaluation Standards**

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| ***About Letter Grades and Percentages***  The role of letter grades in the BC school system has been redefined to align with the larger vision of personalized learning.  The definitions will move from single words “(e.g. “Very Good”) to more informative descriptions and indications of the learner’s level of achievement.  In this way, letter grades will help educators communicate effectively about student success in meeting achievement expectations, and demonstrate the current status of the students’ performance in relation to attaining achievement expectations.  **Questions – Letter Grades & Perentages:**  **What is the appropriate level (or age, stage, grade) at which to introduce letter grades as part of formal reporting?**  **What are your thoughts on eliminating percentages?**  As another move towards criterion-based assessment, percentages will no longer be used on provincial report cards or transcripts. Grade Point Averages (GPA) will appear in transcripts. |

**SUPPORTING PERSONALIZED LEARNING: Technology and Systems**

Personalized learning gives students more responsibility for their own learning, while at the same time elevating the need for more useful and timely information to inform learners, families, educators, and decision-makers about specific student needs and school system performance.

Technologies and support systems enable varied learner groupings, allow for the expanded realm of potential teachers, mentors and the various resources available in personalized learning models.

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| Students: Early Years | Students: Middle Years | Students: Grad. Years | Teachers |
| In the Early Years, educational technologies will be strongly mediated by teachers in diagnostic, intervention, planning, learning, and assessment processes. Young learners begin to use digital picture, video, and audio tools to develop creative and cooperative competencies. The internet’s ability to bring the world into the schoolroom assists young learners in learning about global connections without the cost of travel. | The Middle Years provide an opportunity for students to gain levels of skills and competence in the use of technology to enhance their learning. They use the skills garnered in their early years to explore the digital world with growing sophistication and proficiency. Their curiosity enables them to investigate a greater variety of resources and materials. As the levels of their moral and social development increase, they are able to view these materials with greater degrees of critical insight. | For students in the Graduation Years, the school is a base camp for learning activities within the school, in the local community, and beyond. Students move between spaces that are most relevant to their current projects or programs. The focus in the upper years is to increase and extend competencies developed in the Middle Years through independent, small group, and large group learning that may occur any time of day. | Teachers work with   * learning data and the tools to use and understand it; * digital tools and resources for developing and implementing relevant learning experiences; * students to support learning in school and in the community; * resources and expertise to improve their own instructional techniques.   Teachers will need to be very comfortable with a wide range of ICT tools to work effectively in a personalized learning system. |

## Distributed Learning (DL)

**Question – Technology and Systems**

* **“Done right”, how can technology help “personalize” learning?**
* **“Done wrong”, how can technology hinder personalized learning?**
* **What investments need to be made at the provincial and local levels?**

The delivery formats for secondary DL reflect the needs

of different regions and student needs:

* fully online
* blended FTF
* highly directed and structured
* highly student-centric

Current access for students in Grade 10 /12 should be extended to students in Grade 4/9 and to allow students to enrol in more than one school. Personalized learning would also require change in online content and activities.

## Common Tools in a Learner Support System

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| * Portal * Learning Management System * Learning Object Repository * Learner Achievement Reporting * Online Resources | * Personalized Learning Plan * Performance Standards/Learning Outcomes * E-Portfolio * Learner Information/Record System | * Self Assessment * Web-conferencing * Web 2.0 Tools * Messaging * Productivity Software |

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